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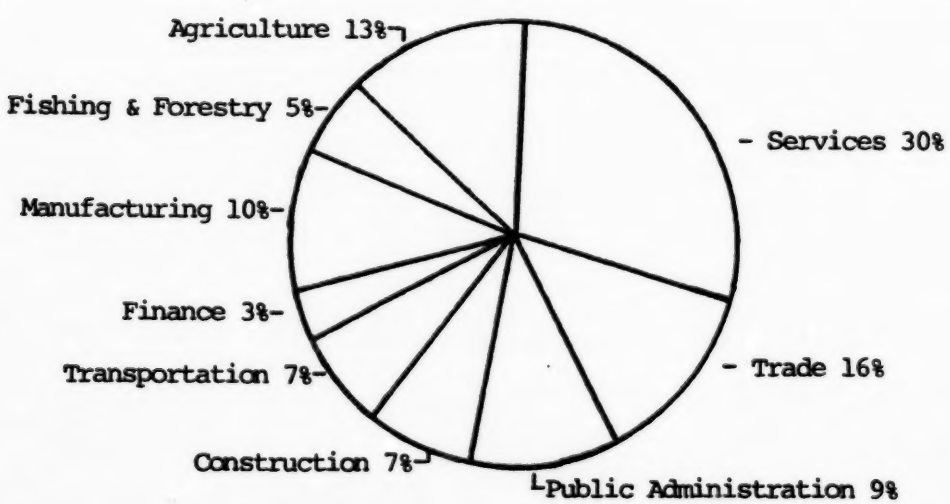
THE INDUSTRIAL COMPOSITION OF THE PRINCE EDWARD ISLAND ECONOMY

1. Introduction

The purpose of this paper is to describe the industrial composition of the Prince Edward Island economy. There are many requests for this type of information and judging by the nature of the questions, many find difficulty in understanding the relative contributions of, say, fishing, tourism, the government sector, or agriculture to the provincial economy. While there are no absolute standards for evaluating such concerns, there are sufficient data to at least improve general knowledge of the industries of Prince Edward Island.

It is often a surprise to the public to find that the industrial structure of P.E.I. is far more diverse than was realized. It is popularly believed that the P.E.I. economy can be decomposed into three general sectors; farming, fishing, tourism, with other sectors being related to these three general areas. But in Diagram 1, one can see that agriculture, forestry and fishing provide only 18% of all employment on the Island while the largest single industry group, providing

Diagram 1



Employment by Industry, P.E.I., 1980

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30% of employment on P.E.I., is formed by the community, business and personal services industry (shown in Diagram 1 as simply services). In combination with the retail and wholesale trade industry, these industries account for over 45% of all employment on Prince Edward Island. These figures, incidentally, include both the self-employed as well as employees. The actual numbers are displayed in Table 1.

Table 1

EMPLOYMENT BY INDUSTRY, P.E.I., 1980

Agriculture	6,000	13
Other Primary	3,000	5
Manufacturing	5,000	10
Construction	4,000	7
Transportation, Utilities, etc.	3,000	7
Trade	8,000	16
Services	14,000	30
Public Administration	4,000	9
Finance, Insurance	1,000	3
TOTAL	48,000	100

Source: P.E.I. Department of Finance estimates based on Labour Force Survey data, Statistics Canada 71-001. Rounded to nearest thousand.

The immediate reaction to these data is that P.E.I. has far too little employment in the primary and manufacturing sectors relative to the other sectors, but by comparison to other provinces and the Canadian situation in general, this is not so apparent. In Tables 2 and 3, the relative contribution of industries to total employment for Canada and selected provinces is shown. From Table 2 one finds that the percentage of people employed in non-primary or manufacturing industries ranges between 70% in Ontario to 78% in Nova Scotia,

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Table 2

DISTRIBUTION OF EMPLOYMENT BY INDUSTRY, 1980
CANADA, P.E.I., AND SELECTED PROVINCES
% EMPLOYMENT

	Canada	P.E.I.	N.S.	Ont.	Sask.	Alta.
Agriculture	4.5	12.9	2.1	3.5	20.8	7.9
Other Primary	2.8	5.2	4.6	1.5	3.1	6.1
Manufacturing	19.8	9.6	15.2	24.9	5.4	9.4
Primary & Secondary Industries	27.1	27.7	21.9	29.9	29.3	23.4
% Employment In Other Industries	72.9	72.3	78.1	70.1	70.7	76.6

Source: Table 1

and Prince Edward Island at 72.3% is not exceptional. While there is considerable variation in the percentages of employment in agriculture, other primary sectors, and manufacturing (depending on the nature of the resource base of the various provinces) it can be seen that generally speaking the primary and secondary industries provide no more than 20%-30% of total employment anywhere in Canada.

The distribution of the "other" industries is very similar for various provinces, as Table 3 shows, based on employment per capita. As a percentage of the provincial population,

Table 3

"OTHER INDUSTRIES" AS % OF POPULATION, 1980
CANADA, P.E.I., AND SELECTED PROVINCES

By Industry	Canada	P.E.I.	N.S.	Ont.	Sask.	Alta.
Construction	2.6	2.8	2.6	2.6	2.8	4.7
Transportation, Utilities, etc.	3.8	2.7	3.2	3.6	3.6	4.4
Trade	7.7	6.2	7.4	7.8	7.8	9.0
Finance, Insurance	2.5	1.0	1.9	2.9	2.0	2.7
Services	12.9	11.5	11.4	13.3	11.1	14.0
Public Administration	3.1	3.5	3.6	3.1	3.4	3.2
Total	32.6	27.7	30.1	33.3	30.7	38.0

Source: Table 1, Population Estimates, Statistics Canada, 91-201.

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employment on Prince Edward Island in these sectors is actually somewhat lower than the Canadian average. The overall impression is that the distribution of employment by industry in Prince Edward Island is not unusual in the Canadian context.

2. The Classification of Industries

In order to discuss the industrial composition of the Province it is important to have a common understanding of definitions of industries and this is frequently a cause of difficulty. Statistics on industries are collected on the basis of the smallest economic unit for which data are generally available, namely establishments. The primary economic activity of these establishments is determined by their type of operation and this in turn determines which industry these activities are classified under. The key to understanding the industrial classification of establishments is in this determination of their primary economic activity.

There are two important aspects of this. Firstly, the industrial activity is determined by the precise nature of the type of operation of the establishment; and, secondly, where establishments undertake several activities, the determining factor is the primary activity of that establishment. This method of classification is undoubtedly not suitable for all purposes, but it is probably the only clear-cut method which is practical. By this method, there is no industry group which might be called, for example, rural or a crafts industry, or perhaps more significantly there is no classification for a tourist industry. In addition, where an activity generally forms a secondary or minor aspect of a larger operation it would not appear. For example, the woodlot operations of farmers would not be counted as forestry. Thus activities, generally speaking, have to be of a significant individual nature to be included in a particular industry.

Problems often arise in discussing industries simply due to a general lack of knowledge of what activities are actually attributed to specific industry groups. Statistics Canada produces a Standard Industrial Classification (SIC) which is updated from time to time which clearly defines these industry groups. In order to improve understanding of these, Table 4 displays each of the industry groups in the SIC, showing some of the detail below each of the groups.

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Table 4

THE STANDARD INDUSTRIAL CLASSIFICATION

01 Agriculture

- Dairy Farms
- Beef Farms
- Hog Farms
- Poultry Farms
- Field Crops
- Fruit and Vegetables
- Horticulture
- Services Incidental to Agriculture
- Agriculture Research
- Veterinary Services
- etc.

03 Fishing and Trapping

- Atlantic Salt Water
- Inland Fishing
- Services Incidental to Fishing
- Fisheries Inspection and Protection

04 Logging and Forestry

- Logging
- Forestry Services
- Firefighting, Reforestation Farms, etc.

06 Mines, Quarries, Oil Wells

- Metal Mines
- Non-metal Mines
- Coal
- Crude Petroleum and Natural Gas
- Quarries and Sandpits
- Contract Drilling

10 Manufacturing

- Food and Beverage
- Rubber and Plastics
- Leather
- Textiles and Clothing
- Wood Industries, Furniture, Pulp & Paper
- Printing and Publishing
- Metal Industries
- Machinery
- Transportation Equipment
- Electrical and Electronic Products
- Non-metallic Mineral Products
- Petroleum and Coal Products
- Chemical and Chemical Products
- Etc.

40 Construction

- Builders and General Contractors
- Heavy Engineering
- Trade Contractors

45 Transportation, Communications & Other Utilities

- Air Including Airports
- Railway Transport
- Water Transport, Including Ferries,
- Truck Transport
- Public Passenger Transit
- Taxicabs
- Highway, Street and Bridge Maintenan
- Storage and Warehousing, Including Grain Elevators
- Communications, Radio, T.V., Post Of Telephones
- Electric Utility
- Water Systems

50 Wholesale Trade

- Farm Products
- General
- Fuel Oil
- Lumber and Building Materials

60 Retail Trade

- Food, Groceries
- Liquor Stores
- Drug Stores
- Clothing
- Furniture and Appliance
- Automotive
- Service Stations
- General Merchandise, Other
- Specialty Stores, etc.
- Vending Machines

70 Finance and Insurance, Real Estate

- Banks
- Trust Companies and Other Finance
- Insurance Agencies
- Investment Dealers
- Real Estate Agents

77 Business Services

- Accounting
- Advertising
- Architects
- Lawyers

80 Government Services

- Defence
- Federal
- Provincial
- Local

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Table 4 Continued

85 Education
- Elementary and Secondary
- Post-Secondary, University
- Libraries, Museums

86 Health & Social Services
- Hospitals, Doctors, Dentists, Specialists
- Homes for Aged
- Social Workers

91 Accommodation, Food & Beverage Services
- Hotels, Motels, Tourist Cabins and Campgrounds
- Restaurants, Bars

96 Amusement and Recreation
- Movie Theatres
- Live Theatres
- Sports, Amusements

97 Personal and Household
- Barbers, Beauty Shops
- Laundries
- Funeral Services

98 Membership Organizations
- Religious Organizations
- Business Associations
- Labour Organizations

99 Other Services
- Machinery Rental
- Photographers
- Welding
- Janitors
- Travel Agencies

Source: Statistics Canada, Standard Industrial Classification, 1980.

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The agricultural group is of considerable importance to Prince Edward Island but it is often not realized that this industry includes not only farmers but also services incidental to agriculture such as experimental farms and veterinary services. Similarly the fishing group includes fisheries inspectors and protection services, and forestry, the forestry services. In addition, the distinction between primary activities and manufacturing activities is often not well understood. Some regard any activity beyond planting and harvesting as manufacturing, whereas others draw a distinction between manufacturing and processing activities. The principal manufacturing activity on Prince Edward Island is the Food and Beverage sector which is one component of the manufacturing industry group. This sector includes dairies, fish plants, meat plants, vegetable products, bakeries and feed mills. Thus processing is a manufacturing activity. But washing, grading and packing farm products is not regarded as a manufacturing activity because in order to be classified as manufacturing some physical process has to be carried out on the product.

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One of the more significant manufacturing industries on Prince Edward Island, which is often overlooked, involves printing and publishing, and this is relatively large because it includes the newspaper printing industry. Nevertheless approximately 72% of Island manufacturing employment is in the Food and Beverage industries.

From Table 1 it was evident that the trade sector is one of the most important groups, in terms of employment for Prince Edward Island. This is predominantly retail trade and it includes such items as service stations, department stores and the Liquor Commission. Again it is commonly thought that all government activities are classified separately from the private sector but under the Standard Industrial Classification, the nature of activity is the determining factor and consequently within any given industry, government and private functions can be included.

The largest single group of industries identified in Table 1 is called services and this actually consists of Education, Health and Social Services, Membership Organizations, Amusement and Recreational Services, Accommodation and Food Services, Personal and Household Services, Business Services and Miscellaneous Services. This large group of activities is dominated by many government-supported functions. For example it includes the Elementary and Secondary school system as well as the University of Prince Edward Island and Holland College. It also includes hospitals, doctors, and various homes for special care. Roughly two-thirds of the activities of this service group are governmentally supported in one form or another.

Under the Standard Industrial Calssification one cannot find a "tourist industry" and there are many inquiries on this sector as tourism is an important aspect of the Prince Edward Island economy; the explanation stems from the way industries are defined and reference to Table 4 should make this clear. Economic activities, and thus industries, are strictly defined by the nature of their operation and not by the nature of their customers. Yet the tourist industry is essentially defined by those whom it serves. There is a wide variety of economic activities which serve tourists in varying degrees, all of whom can be found within the Standard Industrial Classification. One can think of amusement parks, hotels, motels, tourist courts and tourist cabins, golf courses, motion picture theatres, live entertainments, commercial sports, boat rentals, taverns, bars, service stations, retail stores, ferries, bus tours, air travel, car hire, and so on.

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The extent to which any of these industrial activities could be regarded as a tourist business clearly depends on the extent to which they depend upon tourists for their livelihood. Thus the contribution of tourism to the economy can better be thought of as revenue to the region rather than a strictly defined group of economic activities. In terms of Economic Accounts, tourist expenditure is actually one aspect of non resident consumer expenditures.

3. Contributions of Industries to the Value of Production on Prince Edward Island

The value of Gross Domestic Product for Prince Edward Island is published by Statistics Canada, together with the other provinces, an an annual basis. These figures can theoretically be broken down into their industrial components, but unfortunately this is not on a provincial basis. Nevertheless, Statistics Canada have made some progress in this direction and now prepare estimates of Gross Domestic Product at Factor Cost for selected goods-producing industries. The total value of production of these industries forms approximately 27.5% of total Gross Domestic Product for P.E.I. and available statistics for Prince Edward Island are presented in Table 5.

Table 5

GROSS DOMESTIC PRODUCT AT FACTOR COST

SELECTED GOODS-PRODUCING INDUSTRIES, P.E.I.

($ Million)

	Agriculture	Fishing	Electric Power	Manufacturing	Construction	Total
974	73.0	8.2	6.6	26.4	38.5	152.7
975	37.3	8.5	7.5	29.0	38.7	121.0
976	71.1	8.7	10.6	33.2	35.0	158.6
977	50.2	10.3	10.8	35.5	40.8	147.6
977 % GNP	9.4%	1.9%	2.0%	6.6%	7.6%	27.5%

Source: Statistics Canada 61-202, 1978, Survey of Production. Total GDP from Statistics Canada 13-213, Provincial Economic Accounts.

In terms of a direct contribution to Gross Domestic Product it is interesting to find that manufacturing and construction, during the mid 1970's made as large a contribution to GDP as agriculture and fishing. Since this period there is evidence

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to indicate that both agriculture and fishing have somewhat increased relative to the manufacturing and construction industries, although the contribution of the latter group remains large.

Returning to the discussion of the previous section on tourism, the Tourism Branch of the P.E.I. Government estimated that in 1977, $38.6 million was spent by tourists on Prince Edward Island. This represents 3.4% of Gross Final Expenditures on Prince Edward Island in that year.

5. Conclusions

When considering the industrial composition of the Prince Edward Island economy it is often not understood that by far the greatest proportion of the work force are engaged in services or other non-goods producing activities. The data also show that P.E.I.'s distribution of industries is not unusual in the Canadian context.

While it has not been the purpose of this paper to analyse the economic situation of P.E.I. it must be noted that earned incomes on Prince Edward Island are significantly less than elsewhere and consequently the Island's economy is heavily dependent on federal transfers*. Essentially this stems from the relatively low value of production per worker and consequent low incomes that this generates. The value of Gross Domestic Product per worker in 1979 on Prince Edward Island was $14,227 which was only 60% of the Canadian level (Table 6). On a per capita basis, given high unemployment and low participation rates, Gross Domestic Product per capita was only 51% of the national average. One can begin to understand why this is so when one examines the value of production in individual Island industries.

Table 6

GROSS DOMESTIC PRODUCT PER WORKER, 1978

	Canada	P.E.I.	N.S.	Ont.	Sask.	Alta.
$	23,539	14,227	18,457	23,422	23,686	30,754
Canada	100.0	60.4	78.4	99.5	100.6	130.7

Source: Statistics Canada, 13-213 and Labour Force Survey, Statistics Canada, 71-529.

* This was discussed in Economic Trends No. 5

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Table 7

CENSUS VALUE ADDED PER WORKER, 1976-1978

P.E.I. AND SELECTED PROVINCES

	P.E.I.	N.S.	Ont.	Sask.	Alta.	Canada
Agriculture						
$ Per Worker	11,130.00	10,120.00	11,790.00	16,460.00	13,480.00	12,920.00
Manufacturing						
$ Per Worker	12,490.00	18,200.00	26,220.00	22,120.00	27,590.00	24,540.00
Construction						
$ Per Worker	14,740.00	24,570.00	24,080.00	32,920.00	38,450.00	29,110.00

Source: Survey of Production, Statistics Canada 61-202. Labour Force Survey, Statistics Canada, 71-529. Statistics show averages for 1976-78.

Table 7 shows figures on Census Value Added per worker for agriculture, manufacturing and construction for P.E.I., Canada and selected provinces. It appears that the agricultural sector is not significantly "out of balance" with other eastern farming regions, but manufacturing value added per worker is about one-half of the national average, as is construction value added per worker. Furthermore, the Island's economic disadvantage becomes very apparent from Table 8 where we compare value added per worker in the "other primary sectors" in various provinces. For Prince Edward Island this is effectively limited to the fishing industry*. But Ontario and Nova Scotia also have major mining industries and forestry industries. Saskatchewan has both oil production and mineral

Table 8

VALUE ADDED IN NON-AGRICULTURAL PRIMARY

INDUSTRIES**, 1978, PER WORKER

	Canada	P.E.I.	N.S.	Ont.	Sask.	Alta.
$ Per Worker	$67,149	$10,727	$21,363	$33,385	$138,658	$179,475

Source: Survey of Production, 1978, Statistics Canada, 61-202. Labour Force Survey, 71-529.

* Addition of the small forestry and sand quarry sectors would not alter the general picture.

** Includes Forestry, Fishing, Mining, Oil and Gas.

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production. Alberta of course is earning large sums from its oil and natural gas industry. Thus it is not surprising to find that our value of production per worker is less than one-sixth of the national average for this industrial group.

Until Statistics Canada develops more statistics for the non-goods producing industries, it is not possible to go much further. From the employment data it appears that the Island's service sectors are very large, which is in keeping with other provinces. These sectors basically serve the local population, as does the retail industry. As such, they are not essentially dollar winners for the Island economy in the way that agriculture or tourism is. Yet it could be seen that the Island's "dollar winners" are of modest size compared to other provinces, particularly with respect to manufacturing, and also from the lack of mining, or forestry and oil and gas industries. Thus the development of the service industries is to be found both in the government support provided to many of its parts, as well as in the general income growth of the Province that has occurred.

December 23, 1981